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| Claim | In one sentence, directly and clearly states the idea that the length of an object affects the pitch it produces. (*The length of an object effects the pitch it produces.)* | In one sentence, directly states the idea that the length of an object affects the pitch it produces. (*Length effects pitch.)* | In one sentence, my claim states the correct concept, but does not use scientific vocabulary. (*Big things make a low sound.)* | My claim does not respond to the question, or is inaccurate. |
| Evidence | Uses at least 3 pieces of data from investigations that relate to length, pitch, and rate of back and forth motion. When available, uses quantitative and qualitative data. (*The longer meter stick (80 cm) had a lower pitch and slower vibrations and the shorter meter stick (20 cm) had a higher pitch and faster vibrations.*)  \*May also use the term *frequency.* | Uses at least 3 pieces of data from investigations that relate to length and pitch. When available, uses quantitative and qualitative data. (*The longer meter stick (80 cm) had a lower pitch and the shorter meter stick (20 cm) had a higher pitch.)* | Uses 2 pieces of data from investigations that relate to length and pitch, OR 3 pieces of data that are incomplete. (*The longer meter stick had a lower pitch. The longer nail also had a lower pitch.)* | Uses 1 piece of data from investigations that relate to length and pitch, or uses incomplete data. |
| Reasoning  \*Reasoning just introduced, therefore not expected to be fully developed. | Includes additional observations to attempt to connect data to a science concept. *(I also saw that the longer meter stick vibrated less frequently than the shorter meter stick, so I think how frequently an object vibrates affects the sound it makes.)* | Includes additional observations that are not explained or do not relate to science concept. (*I also saw the tuning forks and the rulers vibrate.)* | Does not include any attempt at reasoning. | Does not include any attempt at reasoning. |